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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/749,825

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John Alson Hicks III

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AT&T Legal Department - SZ

Attn: Patent Docketing

Room 2A-207

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EXAMINER

SALTARELLI, DOMINIC D

ART UNIT

PAPER NUMBER

2421

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/749,825	<b>Applicant(s)</b> HICKS ET AL.	
	<b>Examiner</b> DOMINIC D. SALTARELLI	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,5-14,36 and 39-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-14,36 and 39-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 6, 2010 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed August 6, 2010 have been fully considered but they are not persuasive.

First, applicant argues that inclusion of the PIP processor taught by Meyer into the system disclosed by Humpleman would have a different structure than the claimed structure of "a video overlay processor having a first input connected to the media bus, a second input connected the system data bus, and an output connected to the system data bus", citing that Meyer couples his PIP processor to multiplexers.

In response, while Meyer may disclose outputting to a multiplexer, the fact remains that a bus lies between the PIP processor and the multiplexer. It is non-sequitur to argue that because the claimed overlay processor is connected to a bus, and the PIP processor of Meyer routes the output to a multiplexer, therefore Meyer's

disclosure of a PIP processor is fundamentally different from the claimed video overlay processor.

3. Applicant's arguments with respect to claim 36 have been considered but are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 36 and 39-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 36 contains the limitation "configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus". Applicant cites Figure 6 of the originally filed application as support for this limitation. However, the coupling between the System Data Bus and Media Bus shown in Figure 6 is nothing more than a single, unlabeled arrow connecting the two. A description of Figure 6 is found in the specification on page 22 line 16 - page 23 line 8, which simply states that during use, the system data bus

receives information signals from the media bus. In neither Figure 6 nor in the originally filed specification is there any indication that the system data bus is configured in the manner being claimed by applicant, as it is apparent that both the figure and the specification only go so far as to describe the direction data flows during regular use.

Claims 39-46, which depend upon claim 36, are also rejected for this reason.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (6,005,861, of record) in view of Eames et al. (6,493,875, listed on the IDS filed 7/30/07) [Eames], Russo (6,732,366, of record), and Meyer et al. (4,809,069, of record) [Meyer].

Regarding claim 1, Humpleman discloses a system for providing digital entertainment data, the system comprising:

a processor and memory connected to a bus (a "master" set top box containing network interface units, routing received media through itself to the network, thus the processor and memory of this set top box are connected to the media bus the content is output to, col. 5, lines 20-25);

multiple pairs of tuner and demodulator with each pair selecting a respective content item from the plurality of content items (network interface units 32, col. 9, lines 44-64);

a data switch connected to the bus, the data switch receiving the information signals and sending the information signals to a plurality of switch ports (switch hub 38, shown in fig. 2, which comprises crossbar switch 44 which provides the switch ports that connect the devices, col. 5, lines 26-44) with a port for sending high-bandwidth information signals from the data switch (such as for sending video information to set top equipment, see fig. 2); and

Humpleman fails to disclose a system data bus connected to the media bus, a video overlay processor having a first input connected to the media bus, a second input connected the system data bus, and an output connected to the system data bus, the video overlay processor superimposing a first audio-visual signal over a second audio-video signal to produce a superimposed signal and sending the superimposed signal to the system data bus, a network bus connected to the system data bus and receiving the superimposed signal, and a mass storage device connected to the system data bus.

In an analogous art, Eames discloses a system for providing digital entertainment data (fig. 3), and teaches that it is well known to utilize several interconnected buses to route information within a gateway (col. 5, lines 26-36). Designation of the buses within the system is a largely arbitrary practice, since interconnected buses can be considered a single bus or a collection of buses

equally well. Eames simply names buses according to the type of data which they transport.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman to include plural interconnected buses as taught by Eames. While Humpleman clearly inherently includes a bus to transport data from the network interface units to the hub, Eames is evidence that it is obvious to designate plural interconnected buses for the transport of data. Whether the buses in question are physically distinct and indirectly coupled or only separate in the abstract sense cannot be determined, as the claimed media bus, system data bus, and network bus are disclosed in a sufficiently vague manner to include both possibilities (see fig. 6 of the originally filed disclosure). Either case is obvious and well known in view of the prior art, as the sole purpose of a bus is simply to transport data between circuits.

Humpleman and Eames fail to disclose a video overlay processor having a first input connected to the media bus, a second input connected the system data bus, and an output connected to the system data bus, the video overlay processor superimposing a first audio-visual signal over a second audio-video signal to produce a superimposed signal and sending the superimposed signal to the system data bus, and a mass storage device connected to the system data bus.

In an analogous art, Russo discloses a system for providing digital entertainment data (fig. 2) including a mass storage device coupled to a system

data bus and storing information signals (fig. 2, storage 110, col. 7, lines 36-50), providing the benefit of stored programming for later playback (col. 3, lines 9-21).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman and Eames to include a mass storage device coupled to the system data bus and storing the information signals, as taught by Russo, for the benefit of stored programming for later playback.

Humpleman, Eames, and Russo fail to disclose a video overlay processor having a first input connected to the media bus, a second input connected the system data bus, and an output connected to the system data bus, the video overlay processor superimposing a first audio-visual signal over a second audio-video signal to produce a superimposed signal and sending the superimposed signal to the system data bus.

In an analogous art, Meyer discloses a system for providing digital entertainment data that includes an overlay processor superimposing multiple information signals onto a first information signal (fig. 1a, PIP processor 50, col. 1, lines 19-27), providing the benefit of allowing a user to view several sources of video on a screen simultaneously.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman, Eames, and Russo to include an overlay processor superimposing multiple information signals onto a first information signal, as taught by Meyer, for the benefit of allowing a user to view



several sources of video on a screen simultaneously. A PIP processor has two inputs and one output (the two inputs being the main image and secondary image, with the single output being the combined image), and arbitrarily naming the portions of the bus which each input and output is connected to is a matter of semantics that does not affect of the structure of the invention (since physically, there is only a single bus, as disclosed by applicant's originally filed specification, see fig. 6).

Regarding claims 5 and 6, Humpleman, Eames, Russo, and Meyer disclose the system of claim 1, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier having a value that indicates the content item has been played (for pay-per-play usage, Russo, col. 5, lines 12-21), another value indicated the content items has been purchased (for open ended usage, Russo, col. 5, lines 45-58), a third value indicating the content item has been licensed (available for viewing, Russo, col. 5 line 59 - col. 6 line 9), a cost of playback for each content item (to debit the account for pay-per-play usage, Russo, col. 10, lines 33-34) and a second cost of purchase for each content item (to debit the account for open ended usage, Russo, col. 10, lines 33-34). The examiner recognizes that the pay-per-play and open ended, or 'rental' paradigm, uses are disclosed as alternative embodiments in Russo, however, they are not mutually exclusive and therefore both included

when Humpleman and Eames are modified in view of Russo's disclosure to include the mass storage device.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, Russo, and Meyer as applied to claim 1 above, and further in view of Zhu et al. (5,768,527, of record) [Zhu].

Regarding claim 7, Humpleman, Eames, Russo, and Meyer disclose the system of claim 1, wherein a broadband data port couples to the data switch to a receive a content item from a broadband data service provider (Humpleman, col. 3, lines 21-35), but fail to disclose the content item is downloaded and stored on the mass storage device at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback.

In an analogous art, Zhu teaches a system for providing digital entertainment data (fig. 5, col. 10, lines 17-38), wherein content items are downloaded and stored at a data rate that is less than a playback rate in bytes per second (the rate scaler reduces the download rate to a value less than the original playback rate, from  $R_i$  to  $R'_i$  to accommodate for the limited bandwidth that has been determined to be available for transmitting content), and the system monitoring when a remaining amount of time required to complete the

download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback (there is an inevitable delay involved where an amount of data must first be buffered such that the user will not experience interruptions in playback while the rest of the content is downloaded at the slower than playback rate, col. 4, lines 4-14 and 42-48). This provides the benefit of allowing a viewer to receive and playback content items over low bandwidth connections (col. 8, lines 25-40) without having to wait for the entire file to be downloaded first (col. 4, lines 42-48).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eames, Russo, and Meyer to include the content item is downloaded and stored [on the mass storage device] at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback, as taught by Zhu, for the benefit of allowing a viewer to receive and playback content items over low bandwidth connections without having to wait for the entire file to be downloaded first.

9. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman, Eames, Russo, and Meyer as applied to claim 1 above, and further in view

of Tsukagoshi (6,104,861, of record) and Halliwell et al. (5,473,772, of record)

[Halliwell].

Regarding claim 8, Humpleman, Eames, Russo, and Meyer disclose the system of claim 1, wherein a broadband data port couples to the data switch to a receive a content item from a broadband data service provider (Humpleman, col. 3, lines 21-35), the content item communicated from the data switch for storage at the mass storage device (Russo, fig. 2, storage 110), but fail to disclose the content item comprises a content item storage position identifier specifying a logical storage position in the mass storage device, and when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device.

In an analogous art, Tsukagoshi teaches a system for providing digital entertainment data comprising generating content item storage position identifiers specifying a logical storage position in a mass storage device which are downloaded to the storage device along with the content (the data stream addresses regarding their position on the disk, col. 14 line 45 - col. 15 line 23), providing the benefit of indexed content which is easily searchable by a user (col. 15, lines 24-45).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Humpleman, Eames, Russo, and Meyer to include generating content item storage position identifiers specifying a logical storage position in a mass storage device which are

downloaded to the storage device along with the content (the data stream addresses regarding their position on the disk, as taught by Tsukagoshi, providing the benefit of indexed content which is easily searchable by a user.

Humpleman, Eames, Russo, Meyer, and Tsukagoshi fail to disclose when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device.

In an analogous art, Halliwell discloses a system for providing digital data comprising a mass storage device, wherein new content item storage position identifier are downloaded for content item already stored on the mass storage device when new content items are downloaded (the new position identifier is a delete command to remove the old content item to make room for the new content items, col. 7, lines 43-52).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Humpleman, Eames, Russo, Meyer, and Tsukagoshi to include a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device, as taught by Halliwell, for the benefit of improved automatic maintenance of the limited amount of storage space available on a mass storage device, automatically deleting old content items when necessary to make room for the new content items.

Regarding claim 9, Humpleman, Eames, Russo, Meyer, Tsukagoshi, and Halliwell disclose the system of claim 8, further comprising a first multimedia input, the first multimedia input coupled to the multiple tuners, wherein the first multimedia input is to receive a plurality of transmission signals (Humpleman, col. 3, lines 36-43, wherein the number of NIUs [the tuners] is determined by the number of streams that are simultaneously required from the available sources, wherein the multimedia input is a multiplex of broadcast signals carried by a coaxial cable, col. 3, lines 21-35).

Regarding claims 10-14, Humpleman, Eames, Russo, Meyer, Tsukagoshi, and Halliwell disclose the system of claim 9, wherein the plurality of transmission signals include a plurality of television program signals (digital or mixed analog/digital broadcast signals), an audio signal (compressed audio), a data signal (Internet data), are received from a cable headend or direct broadcast satellite (cable provider or digital satellite service), and are frequency divided multiplex transmission signals (as is conventional for cable and satellite television broadcast services, Humpleman, col. 3, lines 21-35).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIC D. SALTARELLI whose telephone number is

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(571)272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dominic D Saltarelli/  
Primary Examiner, Art Unit 2421